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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,774

02/07/2005

John G Harrison

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EXAMINER

NI, SUHAN

ART UNIT

PAPER NUMBER

2614

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/523,774	<b>Applicant(s)</b> HARRISON, JOHN G	
	<b>Examiner</b> Suhan Ni	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 21-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Election/Restriction***

1. This communication is responsive to the provisional election made without traverse on 12/04/2009 to prosecute the invention of Group I, claims 1-20. Other Groups, including claims 21-24 are withdrawn from further consideration, as being drawn to a non-elected invention. A complete reply to a future final office action must include cancellation of non-elected claims or other appropriate action (37 CFR 1.144). See MPEP § 821.01.

### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on **a separate sheet** within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

### ***Claim Rejections - 35 USC § 112, 1<sup>st</sup> Paragraph***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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3. Claims 1, 3, 5, 7, 11, 13, 15 and 17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claimed features or limitations are not clearly supported by specification as following:

Regarding claim 1, the limitation of “**at least 50%**” in line 2 is not clearly supported by specification, since it lacks of teaching how such limitation has been determined.

Regarding claim 3, the limitation of “**between 60% to 90%**” in line 2 is not clearly supported by specification, since it lacks of teaching how such limitation has been determined.

Regarding claim 5, the limitation of “**between 1% and 40%**” in line 2 is not clearly supported by specification, since it lacks of teaching how such limitation has been determined.

Regarding claim 7, the limitation of “**between 1% and 10%**” in line 2 is not clearly supported by specification, since it lacks of teaching how such limitation has been determined.

Regarding claim 11, the limitation of “**at least 50%**” in line 3 is not clearly supported by specification, since it lacks of teaching how such limitation has been determined.

Regarding claim 13, the limitation of “**between 60% to 90%**” in line 2 is not clearly supported by specification, since it lacks of teaching how such limitation has been determined.

Regarding claim 15, the limitation of “**between 1% and 40%**” in line 2 is not clearly supported by specification, since it lacks of teaching how such limitation has been determined.

Regarding claim 17, the limitation of “**between 1% and 10%**” in line 2 is not clearly supported by specification, since it lacks of teaching how such limitation has been determined.

***Claim Rejections - 35 USC § 112, 2<sup>nd</sup> Paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 1, 3, 5, 7, 11, 13, 15 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the limitation of “**at least 50%**” in line 2 is indefinite, since it is not clearly how such limitation has been determined.

Regarding claim 3, the limitation of “**between 60% to 90%**” in line 2 is indefinite, since it is not clearly how such limitation has been determined.

Regarding claim 5, the limitation of “**between 1% and 40%**” in line 2 is indefinite, since it is not clearly how such limitation has been determined.

Regarding claim 7, the limitation of “**between 1% and 10%**” in line 2 is indefinite, since it is not clearly how such limitation has been determined.

Regarding claim 11, the limitation of “**at least 50%**” in line 2 is indefinite, since it is not clearly how such limitation has been determined.

Regarding claim 13, the limitation of “**between 60% to 90%**” in line 2 is indefinite, since it is not clearly how such limitation has been determined.

Regarding claim 15, the limitation of “**between 1% and 40%**” in line 2 is indefinite, since it is not clearly how such limitation has been determined.

Regarding claim 17, the limitation of “**between 1% and 10%**” in line 2 is indefinite, since it is not clearly how such limitation has been determined.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Based on the best understanding of the claim language regarding the 112, 1<sup>st</sup> and 2<sup>nd</sup> paragraph rejection above in paragraph 3-4, claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inamiya (U.S. Pat. - 5,206,466).

Regarding claims 1 and 11, Inamiya disclose a speaker cone (1) comprising: a hemp fiber; a quantity of non-hemp paper pulp and binding material (col. 3, lines 7-24) as claimed. But Inamiya may not clearly teach the hemp fiber in a concentration at least 50% as claimed. Since Inamiya does teach that the composition/quantity of materials for the cone can directly effect the acoustic characteristics and performance of the speaker (col. 3, lines 33-39, 52-68 and col. 4, lines 22-42), and Inamiya also suggests optimizing the disclosed invention (col. 6, lines 17-23), it therefore would have been obvious to one having ordinary skill in the art at the time the invention was made to be motivated to provide suitable composition, for example the hemp fiber in a concentration at least 51.5%, for the cone of the speaker taught by Inamiya as an alternate choice, or designer's choice (may be guided by an experimental testing), in order to effectively design and manufacture a customized speaker with specific acoustic characteristics for certain application.

Regarding claims 2, 4, 6, 12, 14 and 16, Inamiya may not clearly teach all in details of the material as claimed, but Inamiya does not specially restrict to any material and also clearly

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suggests optimizing the disclosed invention (col. 6, lines 17-23). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to be motivated to provide suitable material (well known and commercially available) such as Manila hemp, for the cone of the speaker taught by Inamiya as an alternate choice, or designer's choice (may be guided by an experimental testing), in order to effectively design and manufacture a customized speaker with specific acoustic characteristics for certain application.

Regarding claims 3, 5, 7, 13, 15 and 17, Inamiya may not clearly teach all in details of the further composition of the material, Since Inamiya does teach that the composition/quantity of materials for the cone can directly effect the acoustic characteristics and performance of the speaker (col. 3, lines 33-39, 52-68 and col. 4, lines 22-42), and Inamiya also suggests to optimize the disclosed invention (col. 6, lines 17-23), it therefore would have been obvious to one having ordinary skill in the art at the time the invention was made to be motivated to provide suitable composition, for example the hemp fiber in a concentration between 60-65%, for the cone of the speaker taught by Inamiya as an alternate choice, or designer's choice (may be guided by an experimental testing), in order to effectively design and manufacture a customized speaker with specific acoustic characteristics for certain application.

Regarding claims 8-10 and 18-20, Inamiya may not clearly teach all in details of the material as claimed, but Inamiya does not specially restrict to any material and also clearly suggests optimizing the disclosed invention (col. 6, lines 17-23). Furthermore, providing suitable and commercially available material for a cone is very well known in the speaker art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to be motivated to provide suitable material (well known and commercially available),

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such as water proof coating material, for the cone of the speaker taught by Inamiya as an alternate choice, or designer's choice, in order to make the speaker more durable, especially under high humidity environment.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Suhan Ni** whose telephone number is **(571)-272-7505**, and the number for fax machine is **(571)-273-7505**. The examiner can normally be reached on Tuesday and Thursday from 10:00 am to 8:00 pm, and may be reached on Monday, Wednesday and Friday from 10:00 am to 8:00 pm. If it is necessary, the examiner's supervisor, **Curtis A. Kuntz**, can be reached at **(571)-272-7499**.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (**PAIR**) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is **(571)-272-2600**, or please see <http://www.uspto.gov/web/info/2600>.

/Suhan Ni/  
Primary Examiner, Art Unit 2614